



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,215	05/31/2006	David Magda Eddy Cortnen	PPI-14102/08	7008
25006 7590 10/27/2009 GIFTORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C. PO BOX 7021 TROY, MI 48007-7021				
EXAMINER MCALISTER, WILLIAM M				
ART UNIT 3753		PAPER NUMBER		
MAIL DATE 10/27/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,215

Applicant(s)

CORTNEN, DAVID MAGDA EDDY

Examiner

WILLIAM MCCALISTER

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,9-15,17,18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,9-15,17,18,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 4, 7, 8, 16, 19 and 20 have been cancelled. Claims 1-3, 5, 6, 9-15, 17, 18, 21 and 22 are pending.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "side wall" of claims 1, 3 must be shown (labeled) or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no mention of a "side wall".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

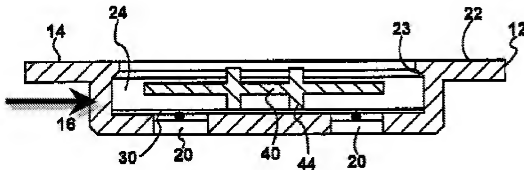
4. Claims 1-3, 5, 6, 9-15, 17, 18, 21 and 22 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the membrane remaining flat below a temperature range of 130 - 180 degrees Celsius and below a pressure range of 4 - 7.5 millibars (see paragraph [0025]), does not reasonably provide enablement for "a membrane formed of cast polypropylene so as to not permanently deform when the package is being heated" (claims 1 and 13). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims without undue experimentation. Polypropylene is a thermoplastic material. That is, by

definition it deforms when heated above its melting temperature. The claims require an absence of deformation over a temperature range above the melting temperature.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3, 5, 6, 9-15, 17, 18, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 13 require "a side wall extending radially from said open end to said closed end..." The only wall between the open and closed ends is illustrated with an arrow in the Figure below.



This wall is cylindrical, with its cylindrical axis extending vertically from the open end to the closed end (i.e., from top to bottom as depicted in this Figure). That is, the wall extends in an axial direction from the open end to the closed end. How does the wall extend radially from the open end to the closed end?

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1-3, 5, 6, 9-15, 17, 18, 21 and 22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,240,796 in view of Hollenstein (US 4,444,219). The '796 patent claims substantively replicate those of the immediate application, with exception to the side wall and the membrane formed of "cast polypropylene". Hollenstein teaches that it was known to form a valve similar to that claimed in the '796 patent using side walls as claimed. To provide space for the '796 patent's retaining member to be inserted into the tubular body, it would have been obvious to use construct the tubular body with side walls as taught by Hollenstein. Regarding the membrane being "formed of cast polypropylene", Hollenstein discloses a similar membrane element (8) to be formed of

polypropylene (see col. 5 lines 12-15), and the product-by-process limitation "cast" does not imply any distinctive structural characteristics since polypropylenes are recyclable thermoplastics (i.e., they continue to exhibit similar properties despite their change in phase). Hollenstein's membrane is also capable of "not permanently deform[ing] when the package is being heated" in accordance with Applicant's intended use, at least before the melting point of the polypropylene membrane is reached (polypropylenes melt at about 160 degrees Celsius). To create a durable rendition of the '796 patent's membrane, it would have been obvious to form it of cast polypropylene as taught by Hollenstein.

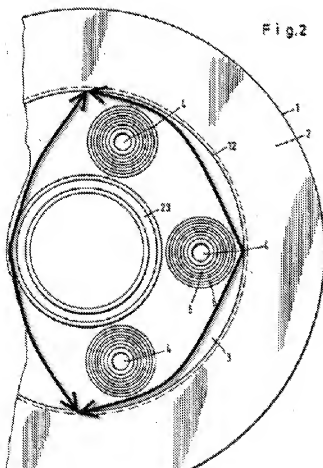
Claim Rejections - 35 USC § 102

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. Claims 1-3, 5, 6, 9, 10, 12-15, 17, 18 and 21 as understood are rejected under 35 U.S.C. 102(b) as being anticipated by Hollenstein.

Regarding claims 1, the structure of Hollenstein's valve is strictly analogous to the structure of Applicant's valve. As such, Hollenstein's disclosure is considered to clearly anticipate Applicant's claimed invention, with exception to the "radially" extending side wall, the "planar surface" of the closed end, and the membrane element "formed from cast polypropylene so as to not permanently deform when the package is being heated".

Hollenstein's wall extends "radially" by virtue of its thickness.

Hollenstein discloses the closed end to have a planar surface (valve seat 3; FIG 2), wherein the planar surface extends between opposite sides of said inner wall surface of said side wall (as illustrated in annotated FIG 3 below). As can be seen, the phrase "extends between" does not preclude the interposition of non-planar surfaces (4, 5, 6, 23), since planar surface 3 extends around the non-planar surfaces.



Regarding the limitation "formed of cast polypropylene", Hollenstein discloses the membrane element (8) to be formed of polypropylene (see col. 5 lines 12-15), and the product-by-process limitation "cast" does not imply any distinctive structural characteristics since polypropylenes are recyclable thermoplastics (i.e., they continue to exhibit similar properties despite their change in phase). Hollenstein's membrane is also capable of "not permanently deform[ing] when the package is being heated" in accordance with Applicant's intended use, at least before the melting point of the polypropylene membrane is reached (polypropylenes melt at about 160 degrees Celsius).

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
11. Claims 1-3, 5, 6, 9-15, 17, 18, 21 and 22 as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollenstein.

Regarding claims 1-3, 5, 6, 9, 10, 12-15, 17, 18 and 21, the analyses set forth above show that Hollenstein at least substantially discloses the claimed invention. Should it be determined that the product-by-process limitation "cast polypropylene" implies structure which is distinct from that of Hollenstein's polypropylene, it would have been obvious to

one of ordinary skill in the art to cast Hollenstein's polypropylene membrane, since there were a limited number of predictable solutions to the problem of forming polypropylene components (e.g., casting or extruding).

Regarding claims 11 and 22, Hollenstein discloses the invention as claimed with exception to the specific dimensions of the apertures and the operating pressure range of the valve. The use of such dimensions and effective operating pressures are mere design expedients that would have been obvious to employ where specific operating circumstances and/or operating environments demand as much.

Response to Arguments

12. Applicant's arguments filed 8/14/2009 have been fully considered but they are not persuasive.

a. Applicant argues that Hollenstein teaches away from a closed end with a planar surface (Remarks, p. 8, ¶1). Even though this argument is included under the heading "§102 rejections", the Examiner presumes that it was made in anticipation of an obviousness rejection since a reference clearly cannot be said to "teach away" from itself. Accordingly, this argument is of no moment because this feature is anticipated by Hollenstein as shown in the rejection above.

b. In response to Applicant's argument that the references fail to show certain features of Applicant's invention (Remarks, p. 8, ¶2), it is noted that the features upon which applicant relies (e.g., the lack of sealant, the lack of

channels) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

c. Applicant argues that unlike Hollenstein's valve, Applicant's valve is resilient and maintains its form under heat (Remarks, pp. 8-9). In response, these features are seen as broadly recited and inherent to Hollenstein's valve, as set forth in the rejection.

d. Applicant argues that Hollenstein teaches away from the use of cast polypropylene because Hollenstein discloses a different intended use than that of Applicant, and because Applicant's membrane functions differently (Remarks, pp. 9-10). These arguments are irrelevant to the anticipation analysis. With regard to the obviousness analysis, and without conceding the accuracy of these assertions, the Examiner disagrees that they constitute a "teaching away." There is nothing inherent to use with coffee grounds or sealant which would preclude one of skill from forming Hollenstein's polypropylene membrane by a process of casting.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM MCCALISTER whose telephone number is (571)270-1869. The examiner can normally be reached on Monday through Friday, 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WILLIAM MCCALISTER/
Examiner, Art Unit 3753

/John Rivell/
Primary Examiner, Art Unit 3753

10/24/2009